

Highlights of Report on Existing Asset Default Costs for VM-20

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Sections of Report

- I. Executive Summary—purpose, objectives, brief description
- II. Methodology to calculate prescribed annual default costs
 - Specifications for calculations performed by the company
 - Details of four components of prescribed annual default costs
 - Precursor to VM-20 language
- III. and IV. Data & methodology to calculate baseline default costs and prescribed gross spreads
 - Specifications for reference tables calculated / updated by the NAIC
 - Precursor to report that VM-20 would reference
- V. Further decisions needed to implement the methodology
- VI. Appendices—includes proposed baseline default costs and implied margins, underlying data, illustrative benchmark spreads



Section I - Executive Summary

- States purpose, objectives, and four components of methodology
- Mostly the same as basis illustrated at Fall National Meeting
- LRWG originally proposed prudent estimate approach but has developed prescribed methodology at LHATF's request
- Restates regulatory objective on “riskier assets”—previous hard line approach had resulted in too much volatility
 - Report: “In most economic environments the method should not reward companies for choosing a long-term strategic asset allocation for which the overall portfolio is riskier than some threshold or ‘line in the sand’”
- Did not specifically add a regulatory objective to limit volatility but methodology has been moving in that direction



Section II—Summary of the Four Components for Sample Bond #1 as of 11/30/2007

(corrects and expands display on page 4 of the report)

Sample Bond #1--A3/A- Benchmark

PBR Credit Rating	7
Option Adj Spread (bps)	200.5
Weighted Avg Life (yrs)	7
Investment Expenses (bps)	10

Component	Year 1	2	3	4+	7 Year Average
Baseline Default Cost	18.0	18.0	18.0	18.0	18.0
Spread Related Component	16.3	10.8	5.4	0.0	4.7
Minimum Default Cost Adj	0.0	0.0	0.0	0.0	0.0
Maximum Net Spread Adj (portfolio)	66.4	49.3	27.1	0.0	20.4
Annual Default Cost Vector	100.7	78.1	50.5	18.0	43.1

Breakout of Baseline Default Cost:

Implied Anticipated Experience	6.8
Implied Margin	11.2



Section II - Summary of the Four Components for Sample Portfolio Average as of 11/30/2007

(supplemental display not included in the report)

Sample Portfolio Weighted Average

PBR Credit Rating	7.1 (approx. A3/A- rating)
Option Adj Spread (bps)	314.1
Weighted Avg Life (yrs)	7
Investment Expenses (bps)	14.5

Component	Year 1	2	3	4+	7 Year Average
Baseline Default Cost	47.2	47.2	47.2	47.2	47.2
Spread Related Component	38.9	26.0	12.9	0.0	11.1
Minimum Default Cost Adj	0.0	0.0	0.0	0.0	0.0
Maximum Net Spread Adj	66.4	49.3	27.1	0.0	20.4
Annual Default Cost Vector	152.5	122.5	87.2	47.2	78.7

Breakout of Baseline Default Cost:

Implied Anticipated Experience	22.4
Implied Margin	24.8



Section II

New definition—PBR Credit Rating

- Baseline default costs are a table lookup based on PBR Credit Rating and Weighted Average Life (WAL)
- Definition of PBR Credit Rating
 - More granular than current SVO designations 1-6
 - Granularity intended to help minimize reward for weighting portfolio toward low end of a rating class
 - Numeric Rating from 1-21 represents every notch from Aaa/AAA, Aa1/AA+, Aa2/AA, ... Caa3/CCC-, Ca/CC, C and below
 - PBR Credit Rating for each security is the average of the available Numeric Ratings based on National Recognized Statistical Rating Organization (NRSRO) ratings, i.e., each available rating carries equal weight
 - Additional rule covers assets with an SVO designation but no NRSRO ratings



Section II - Special Instructions for Certain Asset Types

- Would LHATF be comfortable leaving open for now the treatment of several asset types whose C-1 RBC charge methodologies are under review by the NAIC?
 - Residential Mortgage Backed Securities (RMBS) are receiving new SVO designations for 2009 based on CUSIP-specific loss estimates from an external modeler. Further study by VOS Task Force is expected in 2010
 - RMBS-type approach might be expanded to Commercial Mortgage Backed Securities and other Asset Backed Securities over next year or two
 - Long-term solution to Commercial Mortgage Loans under discussion at Life RBC Working Group
 - VM-20 could incorporate redesigned approaches as they become available prior to the effective date of the VM
- Could VM-20 be adopted initially for 2010 with a placeholder and drafting note for these asset types? Other stop-gap ideas?



Section III—NAIC Baseline Default Calculations

Questions raised from walk-thru of Tables A-E

- Should the prescribed baseline default cost table (Table A) be collapsed to a single weighted average life, e.g., 5 years, and just vary by PBR Credit Rating?
 - Pro: Simplicity, not much variation beyond 3-year WAL anyway
 - Con: Less accurate in matching up default likelihood with length of exposure to the credit
- Should the recovery rate assumption (Table E) be based on CTE 70 or a less conservative statistic, given that default incidence rate is also based on CTE 70?
- Should the recovery rate assumption (Table E) be based on “All Bonds” category or some subset of lien categories typical of insurance company portfolios (e.g., senior unsecured)?



Section III, IV, and V - Additional technical issues (time permitting)

- How to establish NAIC comfort level with sources of historical data and observation periods
 - Baseline default costs
 - Default incidence—Moody’s 1970-20xx
 - Recovery rates—Moody’s 1982-20xx
 - Benchmark gross spreads
 - JP Morgan - US Liquid Index and Domestic High Yield Index
 - 7-year rolling average in illustrative examples
- LRWG would like to further review the interpolation and smoothing algorithms it used to “fill out the tables”
- Application of baseline default costs to par value vs. book value, and consideration of impact of different write-down procedures between companies



What are the big ticket items remaining to be resolved in 2010?

- Development of prescribed reinvestment spreads using an internally consistent methodology
- How much volatility in reserves from one valuation date to the next due to default costs and reinvestment spreads is acceptable?
 - LRWG can describe sources of volatility within the methodology and within a company's portfolio. Quantification would be challenging due to diverse company portfolios and strategies, products with single vs. recurring premiums, recent volatility in bond markets, etc.
- In light of volatility discussion, how should prescribed parameters N , T , $X\%$, and $Z\%$ be set?
 - LRWG Asset Subgroup is currently conducting sensitivity tests
- Is the overall level of conservatism appropriate?
- Should any components be combined or simplified?

